

REMARKS/ARGUMENTS

The claims are 16, 17, 20-25 and 32-39. Claim 16 has been amended to better define the invention, and to incorporate subject matter previously appearing in claim 17. Accordingly, claim 17 has been amended to remove this subject matter. Claim 18 has been canceled in favor of new independent claim 32 to better define the invention and to incorporate the three-layer structure previously appearing in claim 19. Claim 19 has also been canceled in favor of new dependent claim 33, which corresponds to former claim 19 with the three-layer structure recitation removed in view of the incorporation of this structure into new claim 32. In addition, claims 26-31, which depended directly or indirectly on claim 18, have been canceled in favor of new dependent claims 34-39 so as to make these claims which depend from new claim 32 directly follow that claim. As a result, the claims that depend directly or indirectly from claim 16, now also directly follow claim 16, as requested by the Examiner. Support for the claims may be found, inter alia, in the disclosure at page 6 and claims 17 and 19. Reconsideration is expressly requested.

Applicant wishes to thank the Examiner for the courtesy of a telephone interview on September 15, 2005, the substance of which is set forth herein. At the Interview, Applicant's undersigned attorney discussed Applicant's Information Disclosure Statement of August 1, 2003, Applicant's Supplemental Disclosure Statement of February 7, 2005 and Applicant's Second Supplemental Information Disclosure Statement of April 11, 2005, with respect to European Patent Application 1 213 138 and *Verpackungs-Rundschau* 9/98, pages 52 to 54. Applicant's attorney pointed out that a copy of these references was submitted with Applicant's August 1, 2003 Information Disclosure Statement, that Applicant's February 7, 2005 Supplemental Information Disclosure Statement provided a concise explanation of relevance with respect to the *Verpackungs-Rundschau* article, and that Applicant's Second Supplemental Information Disclosure Statement of April 11, 2005 provided an English language translation of *European Application No. EP 1 213 138* (except for the claims). Accordingly, it is respectfully submitted that these references should be made of record, and to that end, Applicant submits herewith another copy of Applicant's Form-1449 listing these references.

Also at the interview, a proposed amendment to claims 16 and 18 was discussed, which corresponds with amended claim 16 and new

claim 32 submitted herein. In the Office Action mailed April 20, 2005, claims 16-31 were rejected under 35 U.S.C. 103(a) as being unpatentable over Miharu et al. U.S. Patent No. 5,912,070. Essentially, the Examiner's position was that Miharu et al. teaches tearable films as recited in the claims, that there does not appear to be any criticality to the order of the layers in the formed laminate, and that it would have been obvious to one of ordinary skill in the art to have laminated the polyester layers together with an adhesive to yield a structure having two surface layers comprising cycloolefin blends. At the interview, this reference was discussed, and the Examiner indicated that he would reconsider the rejection of the claims in view of the amendments and arguments presented at the interview upon filing a formal response to the April 20, 2005 Office Action.

In response, Applicant has amended claim 16 and has canceled claim 18 in favor of new claim 32, which correspond to the amended claims discussed at the interview, and respectfully traverses the rejection for the following reasons.

As set forth in claim 16, as amended, and in new claim 32, Applicant's invention provides a tear open package made of a coextruded sealable film with balanced tear start and tear

propagation properties in crosswise and lengthwise direction of the film. Conventional blown films or flat films have very different mechanical properties in lengthwise and crosswise direction. The problem is that when used, the film package made from these films tears open in an uncontrolled manner. Applicant's invention is directed to providing a tear open package that can be opened along a straight line easily in a controlled way.

As set forth in claim 16, as amended, and in new claim 32, Applicant's invention is directed to a tear open package made of a film that has only three layers. The tear open package is formed from two sheets of the film (i.e. the "adjacent" or "outside" layers) sealed to each other. The package has balanced tear start and tear propagation properties in the machine (lengthwise) and the counter (crosswise) direction and can be torn open along a straight line easily in a controlled way. These features are achieved by the particular structure and composition set forth in claim 16, as amended, and new claim 32.

As set forth in claim 16, as amended, the outside layer (adjacent layer) comprises a polymer mixture of cycloolefin copolymer and a polyolefin or an ethylene copolymer. The

cycloolefin copolymer makes this layer stiff and brittle. Unlike the outside layer, the core layer is stretchable and is formed from a polyolefin. As a result, the outside layer breaks first when an external force is applied to the tear open package. A crack in the outside layer, which determines the tear propagation after the tear start, occurs in the area of the greatest stress. By keeping the direction of the external force constant, the crack in the outside layer, and thereby the tear of the package guided by the crack, propagates along a straight line. As shown in the examples in Applicant's disclosure, these properties can be achieved with a three-layer coextruded film and only a few polymer components. Therefore, the manufacturing costs are low. For example, Applicant's Example 1 uses only cycloolefin copolymer and polyethylene LLDPE C8 as layer A, and polyethylene LLDPE C8 as layer B. Applicant's Example 2 uses only cycloolefin copolymer and polyethylene LLDPE C8 as layer A and polyethylene LLDPE C8 as layer B.

As set forth in new claim 32, one outside layer (first outside layer), which is the sealing layer, is formed from a polyolefin. The other outside layer (second outside layer) comprises a polymer mixture of cycloolefin copolymer, which makes the layer stiff and brittle, and a polyolefin or an ethylene

copolymer. The intermediate or core layer is formed from a polymer mixture of cycloolefin copolymers and polyolefins having a polyolefin content between the values in the outside layers. Thus, the polyolefin content changes step by step from a high value at the sealing layer (first outside layer) to a lower value at the opposite layer (second outside layer). The properties of the opposite layer are defined by the high cycloolefin copolymer proportion. In contrast with the brittle outside layer (the second outside layer) which has a high cycloolefin copolymer proportion, the core layer is stretchable. The claimed combination of layers as set forth in claim 18 having different cycloolefin copolymer proportions results in a multi-layer film having balanced tear start and tear propagation properties in the machine and counter directions.

Miharu et al. fails to disclose or suggest a tear open package made of a multi-layer coextruded film having three layers that has the structure recited in claim 16, as amended, or new claim 32, and also fails to teach the benefits that accrue from that structure for achieving balance tear start and tear propagation properties of the tear open package in the crosswise and lengthwise directions of the film. *Miharu et al.* relates to a multi-layer film that provides a superior resistance to heat

and shock, good barrier properties and easy hand tearability (see e.g. Abstract). Thus, *Miharu et al.* does not address tear propagation properties, i.e. the direction of the tear, but rather only the tearability i.e. the force needed to tear the film. *Miharu et al.*'s film is a laminated film containing a cycloolefin layer (C) and a polyester layer (A) which are joined together by an adhesive which forms a third layer (B). The polyester layer A and especially a biaxial stretching of the layer are essential to *Miharu et al.*'s films (see e.g., Abstract, line 7-9). In contrast, neither a polyester layer nor a stretching of one or more layers are provided in Applicant's tear open package.

Layers with polyester polymers like PET (see, e.g., Example 1 of *Miharu et al.*) usually exhibit a high brittleness. This layer therefore influences or governs the tearability, especially when the brittleness of the cycloolefin layer C is reduced by an admixture of polyethylene copolymers or polyolefins. Therefore, it is expected that the direction of tear properties in *Miharu et al.*'s films would be governed by the polyester layer A or otherwise would not be well defined, even if the cycloolefin layer C is an outside layer. Note that in one of the preferred embodiments of *Miharu et al.*, namely the second laminate, and in

all the examples, cycloolefin layer C is an intermediate layer between the outside polyester layers (see col. 17, lines 62-67 of *Miharu et al.*).

Thus, *Miharu et al.* fails to disclose a three layer film which has two cycloolefin copolymer layers between a core layer of polyolefin (claim 16), or a three layer film having a cycloolefin copolymer as an outside layer, a polyolefin as another outside layer, and a core layer having a mixture of cycloolefin copolymers and polyolefins with a polyolefin content in between the outside layers (claim 32).

Moreover, even if one were to combine two of *Miharu et al.*'s films together, one would still not achieve Applicant's invention as recited in amended claim 16 or new claim 32. Rather, one would have at least a seven layer film and the film would not be coextruded. In addition, the core would include at least two polyester layers, and some of the layers would be stretched.

It is respectfully submitted that the properties of the multi-layer film are governed by all layers of the film. Such a multi-layer film with polyester layers as recited in *Miharu et al.* is manifestly different from Applicant's films. Moreover, it

is expected that *Miharu et al*'s laminated film containing both the brittle polyester layer and a brittle cycloolefin layer would lead to unfavorable tear propagation properties. Accordingly, it is respectfully submitted that Applicant's tear open package as recited in claim 16, as amended, and new claim 32, is patentable over *Miharu et al*. together with claims 17 and 20-25, which depend on claim 16, as amended, and claims 33-39 which depend on new claim 32.

In summary, claims 16 and 17 have been amended, claims 18, 19 and 26-31 have been canceled, and new claims 32-39 have been added. In view of the foregoing, it is respectfully requested that the claims be allowed and that this case be passed to issue.

Respectfully submitted,
Ralf NIEBELT

COLLARD & ROE, P.C.
1077 Northern Boulevard
Roslyn, New York 11576
(516) 365-9802

FJD:djp

Enclosure: PTO-1449 form

Copy of Petition for two-month Extension of Time

Allison C. Collard, Reg.No.22,532
Frederick J. Dorchak, Reg.No.29,298
Attorneys for Applicant

CERTIFICATE OF FACSIMILE TRANSMISSION

Fax No. 571-273-8300

I hereby certify that this correspondence is being sent by facsimile-transmission to the Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on September 16, 2005.

Frederick J. Dorchak

FORM PTO-1449 (REV. 7-80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. : NIEPELT-3		SERIAL NO. 10/633,934	
LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT : RALF NIEPELT			
				FILING DATE: Aug. 4, 2003		GROUP: 1773	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
							YES NO
	AL	1 213 138	06/2002	Europe			
	AM						
	AN						
	AO						
	AP						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AR		Verpackungs-Rundschau 9/98, pages 52 to 54.				
	AS						
EXAMINER				DATE CONSIDERED			
<small>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</small>							